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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/730,095
Filing Date: December 09, 2003
Appellant(s): TSUKAMOTO ET AL.

Andrew J. Telesz, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/3/2010 appealing from the Office action mailed 11/2/2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 6-12 and 20-25.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

Naples et al. (US 2002/0162445 A1)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

35 USC § 101

1. Claims 20-25 are rejected under USC 101, the claimed invention is directed to non-statutory subject matter. In order for a claimed process to be considered statutory it must be: (1) tied to a particular machine or apparatus, or (2) transform a particular article into a different state or thing. The use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility; the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity; and the transformation must be central to the purpose of the claimed process.

In this case, the claimed invention fails to meet either requirement. A showing of a physical transformation requires an actual change in the state of a physical object involved in the process, such as a method for curing rubber. The pending claims are not drawn to such a process and

therefor do not qualify as statutory subject matter under this prong of the test. Therefor the claimed method must be tied to a particular machine or apparatus. With respect to claim 20, the preamble recites "a karaoke service method for a mobile device." Although the preamble recites that the karaoke service method is "for a mobile device", the program itself is not tied to the mobile device. The language of the preamble merely states that the method is intended to be executed by the mobile device, not that it is executed, or connected to the mobile device. Furthermore, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness, but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The claim further recites "storing karaoke contents... in a memory"; "playing sound using a sound generator" and "executing karaoke events using a multimedia processor." The recitation of storing karaoke contents in a memory merely states that the memory is being used to store the data. The process is deemed to be merely extra-solution activity as it is not part of the critical steps and procedures of the claimed process. The recitation of playing sound using a sound generator merely provides playing sound using a software module, as sound generator is disclosed as being software module or program (specification, page 3, lines 7-8, the sound generator receives data from the multimedia processor and sends audio data to the amplifier for driving the speaker; lines 20-21, the sound generator does not play music when receiving synchronization messages, and responds to receiving synchronization messages by providing an

interrupt signal indicating an occurrence of an event to the multimedia processor). As such, the recitation of sound generator is drawn to a computer program or program per se and are thus not tied to a particular machine or apparatus. The last limitation of “executing karaoke events using a multimedia processor” seemingly provides a critical tie of executing the karaoke events using the multimedia processor. However the limitation does not actually provide a critical tie of the steps to the particular machine because the limitation only states that a multimedia processor is used in the performance of the steps, but does not recite how this use occurs. For there to be a critical tie to a machine the machine must actually perform the process, not merely be used in the process. As such there is nothing in the claim which requires any of the steps be performed by the multimedia processor which would create a critical tie of the steps to the particular machine.

Claims 21-25 are rejected for its dependency upon claim 20 for failing to correct these deficiencies. As such, they are rejected for the same reason.

Claim Rejections - 35 USC § 102

2. Claims 6-12 and 20-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Naples et al. (US 2002/0162445 A1).

Re claim 6, Naples discloses a mobile karaoke device comprising: a memory (Fig 1A, server 30 and shared storage 30a) that stores karaoke contents including karaoke event data in time order and song data, the song data having synchronization data embedded therein, and the karaoke event data being representative of karaoke events (¶ 5, 48: a data file contains a standardized performance of music or sound digitally encoded... methods for digitally encoding

the sound include digital recordings or samples in a format such as mp3, as well as synthesizer parameters in a format such as MIDI. The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system; ¶ 49, the data files contains additional content such as timing cues, lyrics, and other features. The additional content is time-correlated to the audio content for synchronous playback);

a sound generator that plays sound responsive to the song data (fig 1A, audio output subsystem responsive to output by the system logic);

and a multimedia processor that provides the song data to said sound generator, and that executes karaoke events according to the karaoke event data (¶ 112, a client device executes system logic of karaoke system. In this embodiment, client device is a personal computer. Client device includes main memory, storage, and a processor, interconnected by a bus; ¶ 126 and 127: OS services include device drivers, a graphics applications programming interface, an audio mixer API, and a file system. The graphics API use visual display device, audio mixer enables system to use audio output subsystem; third party services include an audio synthesizer. Audio synthesizer can read a MIDI stream and render it as audio via audio output subsystem).

said sound generator responding to receipt of the synchronization data embedded within the song data by sending an interrupt signal to said multimedia processor, said multimedia processor executing the karaoke events in accordance with the karaoke event data in time order in synchronization responsive to receipt of the interrupt signal (¶ 10: the synthesizer control data is MIDI data. The virtual instrument pool includes cue data that specifies prompts coordinated with the audio content the interactive part; ¶ 48: The standardized performance is encoded in one

or more parts that can be played back synchronously by an interactive karaoke system; ¶ 49: the data file contains additional content such as timing cues, lyrics, and other features... the additional content is time-correlated to the audio content for synchronous playback; ¶ 57: system logic includes procedures encoded as instructions that can be carried out by a processing device... system logic includes a player application and an engine library; ¶ 164: live interactive playback process instructs performance object to begin playback processing. Playback processing then instructs virtual instrument objects each to begin user input processing).

Re claim 7, memory stores the karaoke event data in groups which are each time ordered (¶ 49: each song includes a set of instructions for time-correlated to the audio content for synchronous playback).

Re claim 8, the multimedia processor divides the karaoke event data into a number of event zones by executing a reset event (different songs within the system, when the user is ready to play a song, the song is selected, loaded and played as explained in ¶ 156-158, when the user is ready to play a different song, a new set of data is loaded and the previous is erased from the system; or ¶ 98: the timing (both the start and duration) of the cue interval has several functions. It shows when a prompt should be displayed to the user).

Re claim 9, memory stores text data as the karaoke event data, the text data representative of text to be displayed by the mobile karaoke device (¶ 186: cue display can prompt the user with lyrics).

Re claims 10 and 11, the memory stores picture data as the karaoke event data, the picture data (claim 10) representative of a picture to be displayed by the mobile karaoke device and video data (claim 11) representative of video to be played by the mobile karaoke device (¶ 107, video track provides interactive visuals synchronized to the live performance. Video track includes a time-encoded series of visual frames for system to present to user in response to user interaction. For instance, automated music training can benefit from video response. Video track can include a stock series of pictures or movies).

Re claim 12, the karaoke event data is audio data representative of audio to be played (¶ 49, the additional content is time-correlated to the audio content for synchronous playback).

Re claim 20, Naples teaches similar recitations of method for storing karaoke contents similar to claim 1, the citations from claim 1 are incorporated herein in addition to particular citations provided here. Naples teaches a mobile karaoke service method comprising: storing karaoke contents including karaoke event data in time order and song data (¶ 48, 49: “The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system. For instance, the standardized performance can be a song or musical performance, with various parts allocated to musicians and their vocals or instruments. The data file contains additional content such as timing cues, lyrics, and other features”), the song data having synchronization data embedded therein, and the karaoke event data being

representative of karaoke events (§ 49 “the additional content is time-correlated to the audio content for synchronous playback”);

playing sound responsive to the song data (§ 48: The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system);

generating an interrupt signal responsive to the synchronization data embedded within the song data is broadly described as methods of playing MIDI data by Naples (Fig 16 shows MIDI mapping playback process, as § 5 generally explains how MIDI is used, “MIDI was designed for the recording and playback of digital audio content on synthesizers. MIDI streams do not represent audio content directly but provided information about how the content is to be synthesized. MIDI streams are multi-track, where each track can be mapped to a discrete profile such as musical instrument. Each track of the MIDI stream includes the discrete notes to be played by that instrument. Since a MIDI file is the computer equivalent of traditional sheet music for a particular song ...”; § 48: The standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system; § 49: the data file contains additional content such as timing cues, lyrics, and other features... the additional content is time-correlated to the audio content for synchronous playback; § 57: system logic includes procedures encoded as instructions that can be carried out by a processing device... system logic includes a player application and an engine library; § 164: live interactive playback process instructs performance object to being playback processing. Playback processing then instructs virtual instrument objects each to being user input processing).

Re claim 21, the karaoke event data is in groups which are each time ordered (§ 49 each song includes a set of instructions for time-correlated to the audio content for synchronous playback).

Re claim 22, the karaoke event data is text data representative of text to be displayed (§ 186, cue display can prompt the user with lyrics).

Re claim 23, the karaoke event data is a picture data representative of a picture to be displayed (§ 107, video track provides interactive visuals synchronized to the live performance. Video track includes a time-encoded series of visual frames for system to present to user in response to user interaction. For instance, automated music training can benefit from video response. Video track can include a stock series of pictures or movies.”)

Re claim 24, the karaoke event data is video data representative of video to displayed (cited above in claim 23, § 107).

Re claim 25, the karaoke event data is audio data representative of audio to be played (§ 49, the additional content is time-correlated to the audio content for synchronous playback).

(10) Response to Argument

Argument against the rejection under 35 USC § 101

The appellant asserts claim 20 is statutory at least because the claim recites "storing karaoke contents ... in a memory of the mobile device, sound is played responsive to the song data ... using a sound generator of the mobile device, and karaoke events are executed... using a multi-media processor of the mobile device." (bottom of page 4 to middle of page 9)

The examiner respectfully submit that the features which the appellant relies upon to support the statutory subject matter (i.e. memory of the mobile device, sound generator of the mobile device, and multimedia processor of the mobile device) are not recited in the rejected claim. The present claim limitations provide recitation of memory, sound generator and multimedia processor and do not provide and correlate each of the components to the mobile device. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, contrary to the appellant's assertion, the limitations and each of the method steps are not critically tied to the mobile device as the mobile device has not been positively recited in the limitation.

The examiner has provided explanation of how recitation of memory device only provides extra-solution activity of storage of data and not part of the critical steps and procedures

of the claimed process; that the recitation of sound generator is software per se and not a particular machine; and why the recitation of multimedia processor in the claim merely states that the multimedia processor is used in the performance of the step, but does not recite how this use occurs, and therefore does not provide a critical tie to a machine actually performing the process in the rejection above and not repeated herein. The claims as presented do not provide any process tied to a particular machine or apparatus as asserted by the appellant.

Argument against the rejection under 35 USC § 102(e)

The appellant asserts that during the prosecution of the application, certain claim terminology has been misconstrued (middle of page 9 to bottom of page 11). The examiner concedes that the broadest interpretation applied to the claim language was at times improper and thus new ground of rejection was applied after examiner's answer dated 11/13/2008. Previous erroneous interpretation of the claim terminology is therefore moot in view of the new ground of rejection dated 3/19/2009.

The appellant further asserts that the prior art does not specifically disclose song data having synchronization data embedded therein as recited in claims 6 and 20. The appellant has particularly provided definition of song data from the specification. The appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The appellant's claim specifically recite "karaoke contents

including karaoke event data in time order and song data, the song data having synchronization data embedded therein."

Naples' invention pertains to an interactive karaoke system that provides data for synchronous playback of audio content in relation to user interface displayed to the user (Naples, ¶ 48-50). Naples discloses of different karaoke contents including karaoke event data in time order and song data in ¶ 49, where Naples teaches of data files (song data) contains content such as timing cues, lyrics, and other features (karaoke event data in time order and song data) that are time-correlated to the audio content for synchronous playback. Naples specifically provides a digital encoding format having synthesizer parameters such as MIDI in ¶ 48. Naples teaches that MIDI is a digital recording format that encodes one or more parts that can be played back synchronously by the system (synchronization data embedded). Naples provides the background information of how MIDI streams actually work in the background of the invention provided in ¶ 5, where Naples teaches that MIDI is designed for the recording and playback of digital audio content on synthesizers. MIDI streams do not represent audio content directly but provide information about how the content is to be synthesized... in another words, the system utilizes synthesizer control data from MIDI stream in order to combine different timing cues of when an audio is to be played, when the lyric is to be displayed to a user, each of the information of how the data is to be played back provides synchronization data as claimed.

Clear distinction can also be found in ¶ 6 of Naples, where Naples provides the difference between audio streams with and without such synchronization data as claimed. Naples provides

that MP3 streams are single track files and do not include information concerning specific musical notes or the instruments utilized in the recording as MIDI would.

The appellant acknowledges that Naples discloses one or more parts that can be played back synchronously by an interactive karaoke system. However the appellant repeatedly emphasize that Naples only generally describe MIDI (musical instrument digital interface) streams and files and does not provide "synchronization timing." The appellant's claim limitations as presented do not recite nor provide a special meaning for "synchronization timing," the claim only requires karaoke event data in time order and song data, the song data having synchronization data embedded. Contrary to the argument provided by the appellant, the "synchronization timing" as specified by the appellant is nothing more than synthesizer control data as provided by Naples allowing the system to manage synchronous playback of the audio contents.

The appellant further asserts that Naples fails to provide the teaching of a sound generator that plays sound responsive to song data, and that also sends an interrupt signal to a multimedia processor responsive to receipt of synchronization data embedded within song data. The appellant specifically asserts that the examiner has not precisely pointed out the sound generator and the interrupt signal feature within the prior art.

The appellant acknowledges on page 17 of the briefing that the system logic (18) includes procedures for playing back the associated live performance in response to user input. Naples

provides the overall interactive karaoke system in ¶54-63, where Naples specifically states that interactive karaoke system plays multipart data files (song data), each of which corresponds to a standardized performance contains one or more parts... including interactive audio-visual features. System logic includes a player application and an engine library. The system receives an input request from a user to play a standardized performance. The system processor retrieves the particular performance desired and sends the specific MIDI content to the system logic. The system logic, particularly the player application receives MIDI content having synchronization data of different audio-visual features. The system logic interprets the MIDI contents according to different timing information and provides synchronized audio-visual signal (interrupt signal) to the processor of when each audio track of the multi-track stream is to be played or when visual representations are presented to the user. Naples further provides detailed hardware information in ¶ 111-118 and software architecture information in ¶ 119-127.

The “sound generator” as claimed is nothing more than the player of the system logic in synthesizing the different components of the MIDI content, and the “interrupt signal” as claimed merely provides the processor signal of when to provide audio-visual information. The concept is figuratively explained in Naples ¶ 5 (MIDI file is the computer equivalent of traditional sheet music for a particular song [figuratively speaking, as opposed to the sound recording for the song itself...]). The appellant has not provided any distinction between the prior art and the claims as presented, only to reiterate that the multimedia processor is capable of performing functions that are not positively recited in the claim language (bottom of page 19 to top of page 20 of the brief).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Kang Hu/

Examiner, Art Unit 3715

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/XUAN M. THAI/

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